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EXAMINER

GORDON, BRIAN R

ART UNIT PAPER NUMBER

1743

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/960,341	Applicant(s) KOMATSU, AKIHIRO	
	Examiner Brian R. Gordon	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 18, 2005 have been fully considered but they are not persuasive.

Applicant asserts plunger 21 of Mar is not a quantitative sampling tip and the plunger is not used to eject materials from the sample holding vial. The name of a device does not structurally differentiate it from any other structurally equivalent device by any name. Therefore regardless of what the device of Mar is called it is a structural equivalent to the device as claimed by applicant. Applicant may elect to name the invention as desired. Furthermore the intended use of a device is not considered a structural limitation.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Mar does disclose the device as having the ability to pass, transport, or eject fluid from the tube through the counter bore 24 and through the passageway 39 of sampling tip 36 which may be detachably engaged to the plunger at the upper end in socket 38 (engaging portion; column 3 lines 9-32). Furthermore, Mar does not preclude one from attaching a suction device in the socket 38 to allow fluid to be sucked therethrough.

Applicant asserts Sabloewski et al do not teach a fitting portion is formed on said fixed volume chamber for fitting with a periphery of the tip of said suction nozzle. The only structural requirement of the phrase is the device has a fitting portion on the fixed volume chamber. Sabloewski et al do teach such a limitation. The claims do not

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positively claim the suction nozzle as an element of the quantitative tip as such there is no requirement for the nozzle tip to be recited in the prior art. The examiner asserts the device only has to have a fitting portion. As seen in the figures and disclosed therein, the cone portion 2 of the device is fitted and connected therein in the body of the pipette, thereby establishing a fitting portion.

As to Jacobs et al. applicant asserts cavity 118 has a tapered transition zone.

The examiner asserts the transition zone is not an element of the cavity that has a constant diameter. The point at which the tapering begins at the upper end of the chamber is considered the through hole having a smaller cross sectional area. Only the constant diameter portion is considered the fixed chamber.

As to Vann et al., in relevance to the fitting portion for fitting with a periphery of the tip of a suction nozzle is considered intended use. The projections as seen in the figures are fitted to a manifold. The reference does not preclude the projections from being capable of being fitted to any other device. Furthermore, there is nothing precluding one from calling the point of attachment to the manifold as a nozzle.

As such the previous art rejections are hereby maintained.

In view of applicant's amendment the previous 102 rejection of claims 1, 5-6, and 8 in view of Vann has been withdrawn, as well as the 103 rejection of claim 5 as based upon Jacobs in view of Pelc.

Specification

2. Claims 2-4, 6, 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

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Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3 is directed to the intended use/function of the device.

It has been held that the recitation that an element is "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Claims 2 and 4 and their respective dependent claims appear to be duplicate claims. The only difference in the claims is claim 2 recites a "fitting portion" and claim 4 "engaging portion". The examiner considers the terms to have the same meaning and do not constituted different structures. Therefore applicant is required to cancel one set of the claims.

Claims 6 and 12 are directed to an intended result which one hopes to achieve though the use of the through hole. There are no numerical values given for one to determine what is an adequate difference in the cross-sectional areas to achieve the result.

Claim Interpretations

3. The claims do not claim a suction nozzle as an element of the device. The suction nozzle appears to be a separate element in which applicant intends for the claimed tip to used with.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 7, 10, and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended the claims and added new claims throughout the prosecution without pointing out where the newly claimed material is supported. After reviewing the original claims filed and a cursory review of the specification the examiner has determined there is no support for the above referenced claims that recite the fixed volume chamber is detachable for replacement. There is support for the entire quantitative tip being detachable from a nozzle tip, however it is not found where the fixed volume chamber may be removed from the engaging/fitting portion and through hole. Furthermore, the base claims do not imply such is possible. The independent claims recite "fitting/engaging portion formed over through hole of said fixed volume chamber". The term "formed" does not imply the elements are detachable from one another.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 3, it is unclear if applicant intends to claim the fixed volume chamber and fitting portion have the ability to be readily attached/detached from one another or if applicant means the two pieces are formed separately and then by some means combined to form one unit. If applicant is attempting to portray the two elements as being readily attachable, this would be considered the same as claims 7, 10, and 13 as explained below. If applicant intends for the latter interpretation, this would simply be a product by process limitation directed to how the device is formed. Process limitations are not considered to be structurally limiting. A structural equivalent manufactured by any other process would meet the limitations of the claim. For the purpose of examination the examiner, assumes applicant is referencing the process by which the device is made.

The claim employs the phrase "configured to".

It has been held that the recitation that an element is "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Claims 5 and 15 are unclear, for it is unclear what applicant is intending to claim or what applicant considers as elements of the invention. The claims recite an apparatus using the quantitative suction tip. The recitation of a device using an element is not considered a positive recitation of that element as being considered an element of the apparatus. Furthermore, the other elements of the claim are claimed in relevance to the suction nozzle. The suction nozzle has not been positively claimed in any of the claims and therefore has no patentable weight in the claim. Furthermore the claimed

suction pump and control unit are further described by "for" clause which express the intended use of each element respectively.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

It is further unclear how the control unit can perform any detection without any additional apparatus being claimed to provide for means of detection. If applicant is referencing the controller as having the ability to be programmed to perform specific functions, it is suggested applicant specifically claim the control unit programmed as such.

Claims 6, 9 and 12 are directed to an intended result which one hopes to achieve though the use of the through hole. There are no numerical values given for one to determine what is an adequate difference in the cross-sectional areas to achieve the result. Furthermore, no detector is claimed to provide such a reading in a pressure change.

Claims 7, 10, and 13 recite the fixed volume chamber is made detachable. It is unclear if applicant intends to claim only the fixed volume chamber is detachable from the remainder of the tip. For the purpose of examination the examiner interprets the claim as such. If so, it is suggest applicant amend the claim to recite "detachable from the upper fixing portion for replacement...."

Claim Rejections - 35 USC § 102

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8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

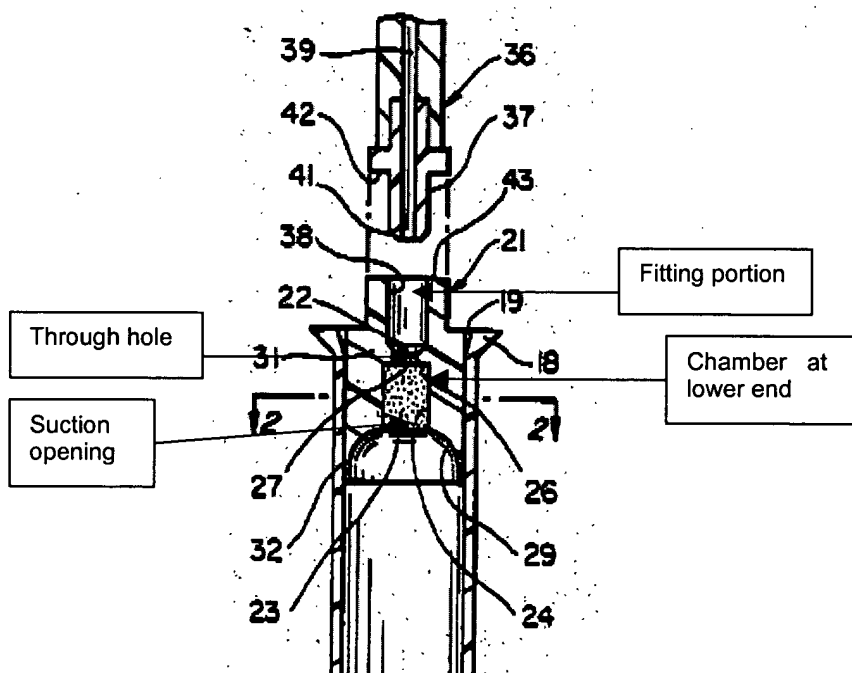
A person shall be entitled to a patent unless –

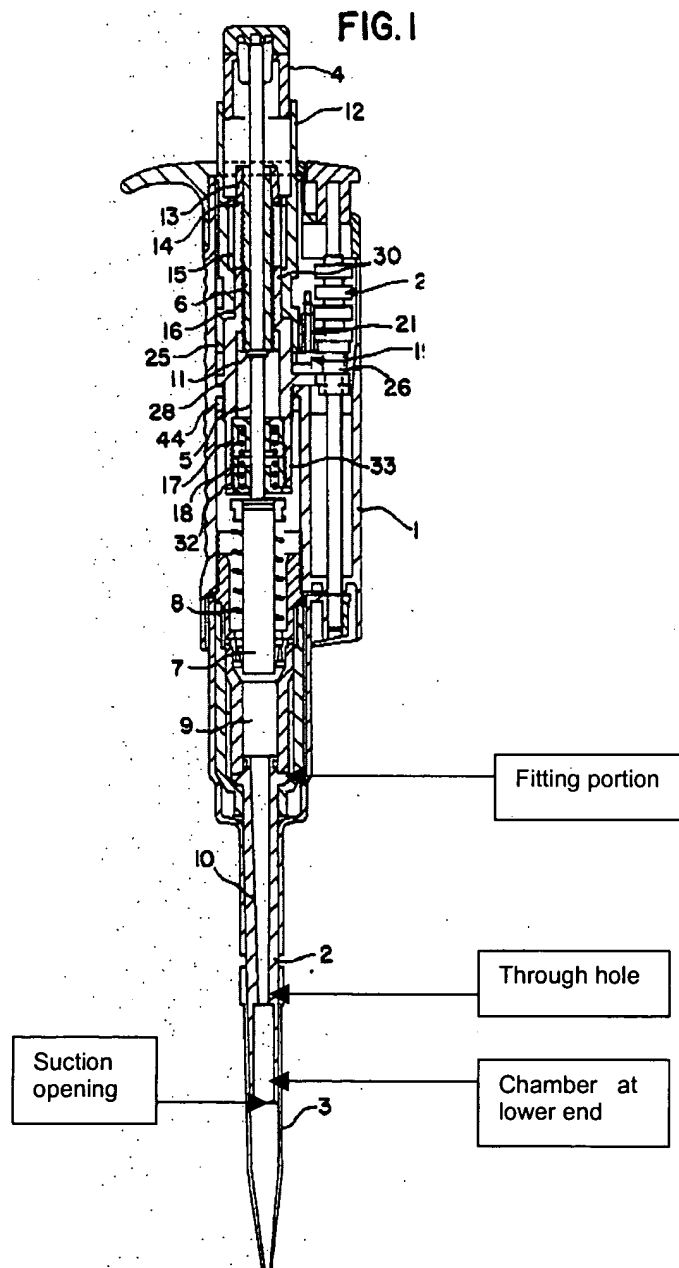
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 2-4, 6, 8-9, 11-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mar US 4,644,807.

Mar discloses a device that is structurally equivalent to that as claimed by applicant (see figure below).





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11. Claims 2-4, 6, 8, 9, 11-12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobs et al. US 2002/0081747.

Jacobs et al. disclose an apparatus and a method for mixing a liquid within a disposable aspirating probe tip so that most of the liquid is forced to move past a transition zone between two different inside diameters to cause rotational mixing. The apparatus and method can be used to provide agglutination of blood, which in turn can be used for blood typing. The probe tip can comprise a single integral piece, or two separate portions. The probe/pipette (suction pump) provides for a vacuum or negative pressure for aspiration of the fluids.

FIG. 3 illustrates certain preferred parameters for optimal mixing in general. Probe 112 has an aperture 134 and an exterior surface 136 adjacent to that aperture, similar to that of the prior art. However, the cross-sectional flow-through area A_2 of cavity 118 (fixed volume chamber), provided by inside diameter D_2 , is preferably no smaller than nine times that of the cross-sectional flow-through area A_1 provided by inside diameter D_1 , of cavity 114. Furthermore, the diameters D_1 and D_2 are generally constant so that their respective cavities are cylindrical. Thus, D_2 is preferably at least equal to three times D_1 .

Useful examples of D_1 and D_2 include, e.g., 0.8 mm and 3.2 mm, respectively, for use with a total height H_2 , FIG. 5, of about 3 mm.

As seen in the Figure the upper portion of the cavity tapers inward to a division wall having a through hole of diameter D_1 .

FIG. 7A, probe portion 112A (suction nozzle)" comprises a conical cavity 118" extending from an aperture 134A", to an upper portion 132A" that connects to a pump, not shown, the inside diameter of cavity 118" increasing with increasing distance from the aperture. To allow the two portions 112A" and 112B" to join together, the exterior surface 136A" adjacent to aperture 134A" is enlarged, also with a tapered shape, such as by securing a cork collar to the rest of the portion 112A". The inside diameter at aperture 134A" is relatively small, e.g., about 1 mm.

The second probe portion 112B", FIG. 7B, has an upper portion 132B" shaped to frictionally mate with surface 136A (division wall with through hole and allows for attachment to suction nozzle)", that is, with an enlarged inside diameter. Portion 112B" tapers down to a lower portion at aperture 134B (suction opening)" producing a cavity 165 (fixed volume chamber)" having an inside diameter that is greatly reduced from said enlarged inside diameter, and in fact, preferably is about the same as that of aperture 134A".

12. Claims 2-6, 8, 9, 11-12, and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Vann et al. US 20003/0021734.

Van et al. discloses a delivery system. The system may comprise a substantially T-shaped frame, denoted generally as 60, supports both extractors 50a, 50b. More particularly, frame 60 includes an upper, horizontal Where a tube already having a longitudinally extending bore or lumen, such as at 86a in FIG. 4(A), is used, cavity 70 can be formed by drilling a counterbore into an end of the tube, with the counterbore

having a diameter greater than the inner diameter of the lumen 86a, yet smaller than the outer diameter of the tube.

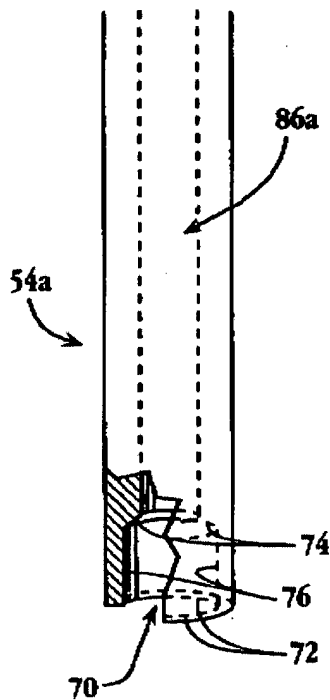


Fig. 4A

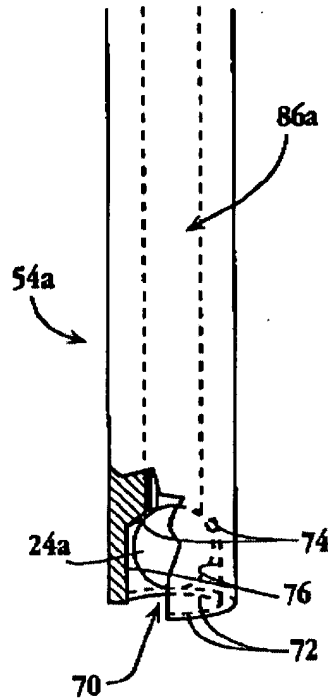


Fig. 4B

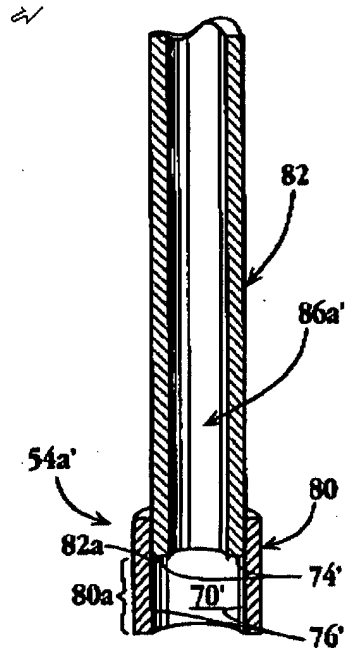


Fig. 5

As seen in the figures above the projections (tips) have a lower cavity (chamber) of constant cross-sectional area terminating at an upper end with a through hole of a smaller cross-sectional area and the lower end has a hole that is equal to the cross-sectional area of the that of the cavity (see also figure 8).

"A pressure-control source in communication with the manifold above each projection array can affect the pressure increase. As shown in FIG. 1, for example, pump 102 can communicate with manifold 88a via flow line 98a; and pump 104 can communicate with manifold 88b via flow line 98b. Upon activating one of the pumps and

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generating an increased pressure in a respective manifold, gas will flow downward through the lumens of a respective projection array in a manner tending to blow any retained objects away from the projection end regions.

Detection instrumentation can be included in the system of the invention for monitoring the various operations. In one embodiment, for example, means are provided for determining whether or not a target object, such as a cover member or bead, is present at the lower end region of each projection. In an exemplary arrangement, cessation of gas flow and/or attainment of an expected (predetermined) low-pressure value in the vacuum flow lines can be used as an indicator that each projection has properly engaged and attracted a target object, such that a substantially airtight seal is formed across the lower opening of each projection." (see paragraphs 0121-0122)

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claim 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al. as applied to claims 2-4, 6, 8, 9, 11-12, and 14 above, and further in view of Pelc et al. US 6,592,825.

Jacobs et al. does not disclose a control unit for detecting the suction pressure and termination of a suction operation upon detection of a change in suction pressure.

Pelc et al. disclose a microvolume liquid handling system including a microdispenser employing a piezoelectric transducer attached to a glass capillary, a positive displacement pump for priming and aspirating transfer liquid into the microdispenser, a controller for controlling the pressure of the liquid system, and means for washing the microdispenser between liquid transfers, and a pressure sensor to measure the liquid system pressure and produce a corresponding electrical signal. Dispensing of a single sub-nanoliter drop can be detected in real time. As the result of

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dispensing the liquid in sub-nanoliter droplets, the dispensed volume can be precisely controlled. The dispenser automatically detects the liquid surface of the transfer liquid, automatically aspirates, analyzes desired volume of the transfer liquid, dispenses the transfer liquid without contacting the destination vessel or its contents, and automatically washes off the transfer liquid from dispensing system after each transfer. This system is capable of automatically sensing liquid surfaces, aspirating liquid to be transferred, and then dispensing small quantities of liquid with high accuracy, speed and precision.

The pressure sensor 14 senses fluctuations in pressure associated with priming the microvolume liquid handling system 10, aspirating transfer liquid 24 with pump 12, dispensing droplets 26 with microdispenser 16, and washing of microdispenser 16 using pump 12.

The device comprises a control logic 42 that instructs pump 12 to move the plunger 34 down in order to aspirate transfer liquid 24 into the microdispenser 16. The pressure signal is monitored by control logic 42 during the aspiration to ensure that the transfer liquid 24 is being successfully drawn into the microdispenser 16. If a problem is detected, such as an abnormal drop in pressure due to partial or total blockage of the microdispenser, the control logic 24 will send a stop movement command to the pump 12. The control logic 24 will then proceed with an encoded recovery algorithm. Note that transfer liquid 24 can be drawn into the microvolume liquid handling system 10 up to the pressure sensor 14 without threat of contaminating the pressure sensor 14. Additional tubing can be added to increase transfer liquid 24 capacity. Once the transfer liquid 24

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has been aspirated into the microdispenser 16, the control logic 42 instructs the robotic system 58 to reposition the microdispenser 16 above the chosen target, e.g., a microtitre plate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Jacobs et al. to include the pressure sensor and control logic of Pelc et al. in order to aspirate liquid to be transferred and dispense small quantities of liquid with high accuracy, speed and precision.

17. Claims 7, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mar US 4,644,807.

18. Mar he plunger is depressed in the vial by means of a sampling tip 36 which is engageable with the upper portion of the plunger and movable between axially extended and retracted positions. The sampling tip has a plug 37 which mates with a socket 38 (fitting/engaging portion) in the upper portion of the plunger to form a fluid-tight seal. The tip has an axially extending passageway 39 which communicates with the passageway in the plunger when the plug is seated in the socket. The side walls of the plug and the socket each have a Luer taper to provide a radial seal between the two parts. The lower end of the plug is chamfered, as indicated at 41, to facilitate insertion of the plug into the socket, and a matching contour is provided at the bottom of the socket. The plug has a radial shoulder 42 which engages the upper surface 43 of the plunger. The dimensions of the plug and socket are such that some interference exists between the male and female Luer tapers before the driving shoulder engages the top part of the plunger and before the tip of the plug is fully seated in the bottom of the socket. Once

the plug is fully seated, a butt seal is provided between the tip and the bottom of the socket in addition to the radial seal provided by the Luer tapers.

Vial 11 and plunger 21 can be fabricated by molding or another suitable process. In one presently preferred embodiment, the vial is fabricated of a relatively inert thermoplastic material which is compatible with strong acids, bases and solvents, yet is strong enough to withstand the internal pressure developed when the plunger is depressed. The plunger is preferably fabricated of a thermoplastic material which is compatible with strong acids, bases and solvents and is sufficiently pliable in thin sections such as skirt 32 to conform to the internal wall of the vial as the plunger is depressed. The small quantities of materials necessary to form such parts are relatively inexpensive, and the parts can be discarded after use. The shape of the mating tip and plunger allows the tip to be fabricated of a more inert material of less strength, and there are no metal ions to contaminate the samples.

It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize the lower portion of the plunger containing the filter may be fabricated to be detachable as that of the socket and plug configuration as taught in order to allow for only the portion of the filter to be discarded when it has become exhausted.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cote; Richard et al.; Perlman; Daniel; Kido; Keishiro et al.; Suovaniemi; Osmo A. et al.; Stanfield; Trevelyan A.; Root; David et al.; Columbus;

Richard L.; Metsala; Seppo J.; Oshikubo; Yuji et al.; and St. Amand; Elmer F. disclose suction and dispensing devices.

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


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Technology Center 700